Badlands Bombing Range Report

U.S. Army Corps of Engineers
Omaha District
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Inside this Issue. . .

The *Badlands Bombing Range Report* is a publication produced regularly to present the latest programs underway that will lead to the eventual cleanup of the Former Badlands Bombing Range (BBR). This newsletter provides information supplementary to that made available at Restoration Advisory Board (RAB) meetings.

The quarter's most exciting news is the completion by the new BBR Project Office staff of the Unexploded Ordnance Assistant training course - yet another step toward the ultimate self-management of the Oglala Sioux Tribe in its own environmental cleanup programs. After completion of this course, the staff will take part in an apprenticeship program where, hopefully, each person will have the opportunity to receive two years of hands-on experience in ordnance identification and disposal. Keep up the good work!

In this issue's **BBR Facts**, common questions asked at RAB meetings by members of the Oglala Sioux Tribe and the general public are answered. In **Badlands Faces**, we present Mr. Joseph Slattery, Assistant BBR Project Manager from the Omaha Corps of Engineers. Also presented are two technologies being tested at the Former BBR that may provide more effective methods for detecting the presence of ordnance or related scrap on difficult Badlands terrain; and an update on the Environmental Cleanup Process at the Former BBR; information on the next RAB meeting; acronym definitions; and the project point of contact ■

State of the Art Technologies to be Tested at the Former BBR

In cooperation among the BBR Project Office, U.S. Army Corps of Engineers, Department of Energy, and Department of Defense (DOD), new state-of-the-art technologies are being brought to the Pine Ridge Reservation to be tested for potential further use in the investigation of unexploded ordnance at the Former BBR, according to Ms. Emma Featherman-Sam, BBR Project Office Director.

Under direction of the Corps of Engineers, Huntsville Engineering and Support Center, Stanford Research Institute is supporting a fly-over of Synthetic Aperture Radar along the Cuny Table area of the Former BBR. In addition, Oak Ridge National Laboratory will support an "over-flight" of an airborne magnetometer and multi-spectral sensors and analysis methodologies. In a nutshell, both technologies use a variety of airborne sensors and perform a terrain analysis from the air to plot potential ordnance in hard-to-reach areas. The rough and varied terrain of the Badlands, which is not kind to foot-traveled or wheel-based systems, make this an excellent opportunity to evaluate these new technologies.

The equipment, currently being tested at another Corps of Engineers project in Denver, Colorado, is being sent to the Former BBR as part of its validation effort. The data recorded by both technologies will be compared to that collected at the Former BBR by the Naval Research Technologies group two years ago.

"These are exciting systems," said Featherman-Sam. *"If either system proves successful, they may be used again for the rest of the range. There is also the possibility of additional funding being provided to develop the systems for use on our project."* ■

The Restoration Advisory Board has changed its format! See RAB Notes on the back page for the latest information!

BBR Staff Being Trained NOW

Many of the new members of the BBR Project Office staff have completed the Unexploded Ordnance (UXO) Assistant training program. Sixteen members of the staff underwent extensive training to help prepare for eventual self-sufficient operation as UXO Specialists at the Former BBR. The staff attended the International UXO Training Program (IUTP) provided by the Texas Engineering Extension Service at Texas A&M's Riverside Campus near Bryan in cooperation with the Sudhakar Company, Inc. *"It is the Oglala Sioux Tribe's goal to one day have a staff of well-trained specialists who can perform our own cleanup of the bombing range,"* said Emma Featherman-Sam.

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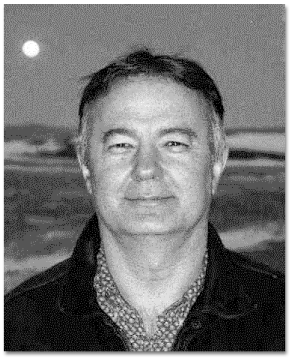
- Partners in Progress -

BADLANDS FACES



Mr. Joseph Slattery

Mr. Joseph Slattery is the Assistant BBR Project Manager for the Corps of Engineers, Omaha District Environmental Programs and Project Management Branch. Joe graduated from the University of Nebraska at Omaha with a bachelor of science degree in chemistry. After college, he worked for the State of Nebraska Department of Health where he analyzed narcotics for the Nebraska State Patrol. He then became an industrial hygienist for the Occupational Safety and Health Administration, where he spent nearly ten years. In 1986, he accepted a position with the Omaha Corps of Engineers. Joe became a Corps project manager in 1998, after nine years as Chief of the Industrial Hygiene Section.

Since coming to the project, Joe has learned about the tribe and would like to get a better appreciation of the sacrifices experienced during the war effort.

"I would like to see the former range returned as closely as possible to its pre-war environmental setting. I am happy to be a part of assisting the BBR Project Office to meet its goal of becoming a self-reliant enterprise with the knowledge and ability needed to compete in the open market."

Pledge from the Park

On March 2, 1999, the National Park Service met with a group of ranchers who have grazing allotments on the South Unit of Badlands National Park to discuss access and resource protection issues. The main concern voiced was the increasing numbers of off-road recreationists using - and abusing - the South Unit. This particular activity is prohibited under park regulations under which vehicles are restricted to designated routes. Unfortunately, no formal routes have been established within the park nor have easements across deeded land for public access to park-administered lands been negotiated. However, thanks to the RAB, the process of identifying such issues has begun and relationships with the Bureau of Indian Affairs and other tribal offices have been established.

Unrestricted public access and unauthorized activities, such as hill climbing and cross country travel, not only damage natural and cultural resources and interfere with approved grazing activities, but puts the users at risk from undiscovered UXO.

"I have pledged to increase our presence in the South Unit this year in an effort to educate and regulate the off-road activities that are occurring," said Mr. Bill Supernaugh, Superintendent, Badlands National Park ■

ACRONYMS

BBR	-	Badlands Bombing Range
DOD	-	Department of Defense
RAB	-	Restoration Advisory Board
HTW	-	Hazardous and Toxic Waste
IUTP	-	International UXO Training Program
UXO	-	Unexploded Ordnance

BBR FACTS

How Can the Restoration Advisory Board "right" all the "wrongs" enacted upon the Lakota people?

The Restoration Advisory Board (RAB) cannot change history. It can only be a positive force for the future. Decision-makers attending board meetings will have the benefit of many points of view, especially those of the Lakota people, to ensure that past mistakes are not repeated. Recording the history of the former range from the Lakota themselves who were affected is a valuable outcome of RAB meetings. Equally important, is receiving input from the Lakota community on the tribe's goals for cleanup of the Former BBR.

Who is a RAB member? As a member of the general public, am I a RAB member?

The RAB is a forum for information exchange made up of representatives from various government agencies involved and members of the local community with a role and an interest in the cleanup process. Individuals from the general public are not automatically "members" of the RAB, but the RAB cannot be successful without their participation and input. An individual can become a RAB member by agreeing to represent their community interest, attend all meetings, participate in the development and review of documents related to the cleanup of the Former BBR, and share this information with the general community.

How long is this project going to last?

The restoration of the Former BBR will take many years to complete. If adequate funding remains available, surface clearance of high priority areas might be completed within three to five years. The portion of the range known as the "High Impact Area" is still retained by the Air Force and falls under different scheduling and funding, and may be completed sooner. However, even after the areas are declared "safe," there will have to be a program of continued monitoring and ordnance and debris disposal for many years, if not decades. This is because ordnance and debris come to the surface each season as the ground freezes and thaws. The BBR Project Office staff is currently being trained to coordinate such a program ■

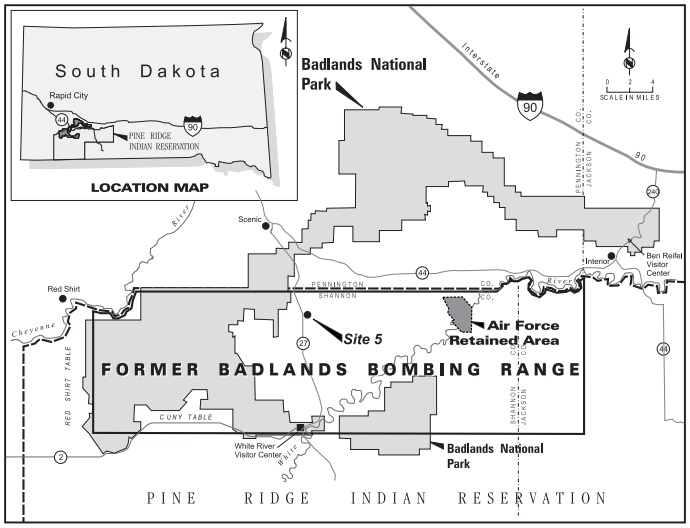
Environmental Cleanup Process: HTW Program Update

Progress at Site 5, the Demolition Area

Field activities were conducted at Site 5, the Demolition Area, during December 2 through 7, 1998 to define the extent of the Demolition Area and identify whether ordnance-related contaminants are present in soil, groundwater, surface water, or sediment in the area.

Site 5 was used in 1964 for demolition of unexploded ordnance collected from the Former BBR. The investigation and analysis identified eight areas within Site 5 used for detonating UXO. However, no residues of explosives were identified during field screening or during laboratory analysis.

A drilling rig was used to take soil samples from within and around Site 5. These samples were analyzed on site for TNT and RDX, two specific types of explosives, to identify the presence or absence of contaminants. All samples were also analyzed in the laboratory for explosives again, and for metals and hydrocarbons (fuel and its by-products). Sediment and water samples also were collected from Wind Creek, which runs through Site 5. Soil samples were also taken in an area near Site 5 where no demolition activities took place to determine the naturally occurring, "background" levels of metals in the general area. Comparison of metals data from background and Site 5 samples will show whether residual metals from ordnance and debris have accumulated in the environment. Once complete, this information will be presented in another *BBR Report* ■



BBR Staff Being Trained NOW

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The course began February 1st at the Oglala Lakota College near Kyle, South Dakota, and continued at Texas A&M. The students spent long hours during normal classroom time and in mandatory study during the evenings learning:

- identification features of various classes of explosive ordnance;
- ordnance identification and detection equipment operation;
- ordnance demolition operations;
- non-electric and electric firing systems.

The students also trained with several varieties of both commercial and military explosives.

This is an historic event for all concerned and represents a significant change in DOD policy. It marks the first time non-military trained personnel will be qualified to work as UXO Assistants on DOD -managed UXO work sites. The UXO Assistant course developed by Sudhakar incorporates the UXO remediation knowledge and skills taught at the military Explosive Ordnance Disposal School and has received interim certification by DOD.

UXO Trainees

This training was only the beginning for this dedicated team. Eventually, these team members will participate in an apprenticeship program. Part of this program will include a 30- to 90-day work opportunity at the Yuma Proving Grounds near Yuma, Arizona. The entire apprenticeship program will take at least two years to complete. *"They still have a long road ahead of them,"* said Featherman-Sam.

This training opportunity is the result of extensive planning and cooperation between the BBR Project Office, the Corps of Engineers, DOD, and the Sudhakar/IUTP staff. The completion of this first class will be a tremendous accomplishment for the Sudhakar/IUTP staff as well as for the students ■

Corps Contact

The *Badlands Bombing Range Report* is researched, written, compiled, and distributed by members of the Corps of Engineers, Omaha District BBR Project team. Articles relating to the environmental restoration of the Former BBR may be submitted for publication by members of the RAB; the Oglala Sioux Tribe; federal, state, or local agencies; and the general public. Mr. Thomas O'Hara has been designated as the official point of contact for all public inquiries concerning the Corps of Engineers' efforts at the Former BBR. All calls and letters directed to other Corps representatives will be re-routed through the Public Affairs Office. To avoid delays, please contact Mr. O'Hara directly at the address below.

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RAB NOTES

The BBR Restoration Advisory Board (RAB) is changing its meeting format to be more of a "workshop environment" to better meet the needs of the public. This format will allow tribal and public members to freely interact one-on-one with BBR Project personnel, agency members, and others involved in the project.

The next BBR RAB meeting will be held on **May 13, 1999**, at the Piya Wiconi Auditorium at the Oglala Lakota College near Kyle, South Dakota. The formal meeting begins at **10:00 a.m.** At noon, the meeting will break for lunch and a three-hour workshop and "walk-through" tour of the cleanup process. The meeting will reconvene at 3:00 p.m. Members of the public are encouraged to stop by and visit with the project team and share their experiences at the former range and any information that will assist in the cleanup efforts.

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